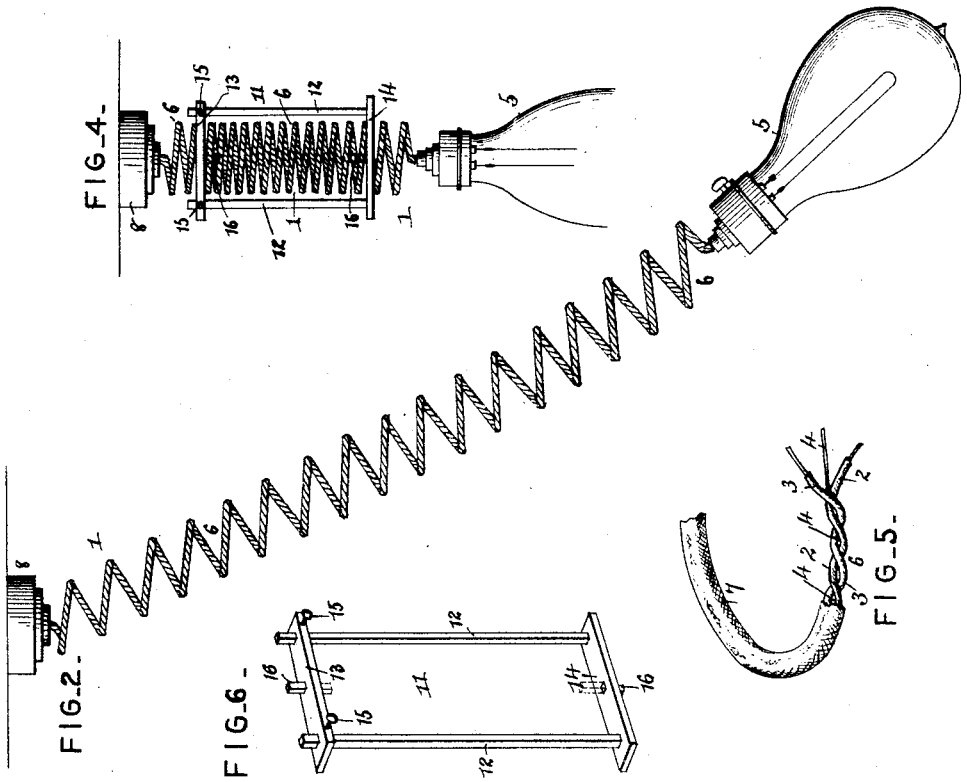
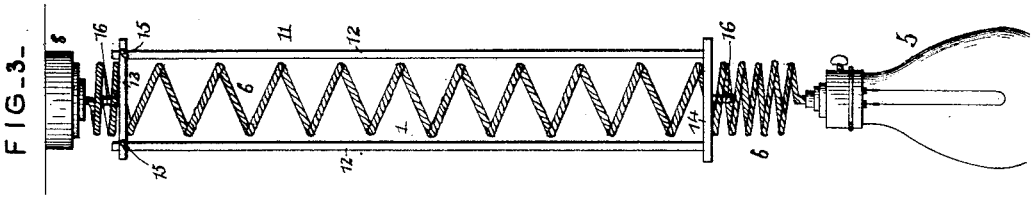
(No Model.)

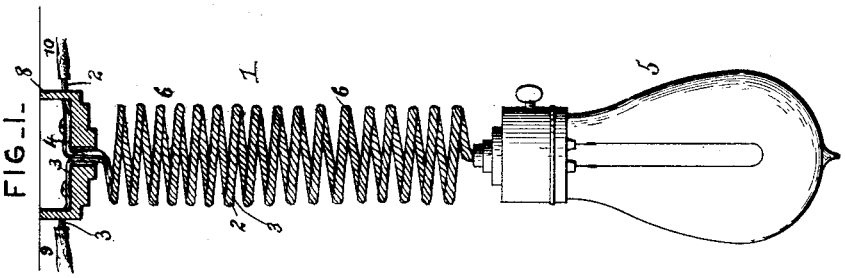
F. A. WEIMER.

ELECTRIC LIGHT HANGER.

No. 457,687. Patented Aug. 11, 1891.







Witnesses

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FRANK A. WEIMER, OF STANBERRY, MISSOURI.

ELECTRIC-LIGHT HANGER.

SPECIFICATION forming part of Letters Patent No. 457,687, dated August 11, 1891.

Application filed March 28, 1891. Serial No. 386,764. (No model.)

To all whom it may concern:

Be it known that I, FRANK A. WEIMER, a citizen of the United States, residing at Stanberry, in the county of Gentry and State of Missouri, have invented a new and useful Electric-Light Hanger, of which the following is a specification.

My invention relates to electric-lamp hangers; and it has for its object to provide a hanger having sufficient flexibility to permit of the lamp being easily carried about from place to place, (within certain limits,) and also to be raised or lowered at will.

A further object of the invention is to provide means for retaining the lamp at any desired height, and also to have the lamp return automatically to its original position when released.

With these objects in view my invention consists in forming the flexible conducting-cord around a core of steel or other spring material, and then winding the so-formed cord in a spiral like a spiral spring, the core having sufficient elasticity to permit it to be stretched or drawn out far enough to allow the lamp to be carried from place to place in the room or hall or even from one room to another, and at the same time having sufficient strength to return and hold the lamp in its original position when the latter is brought back.

The invention further consists of frames which may be placed in the coiled conducting-cord to extend the latter and so hold the lamp in a low position; or the said frames may be so placed in the coil as to draw its convolutions nearer together and so hold the lamp in a position higher than its normal one.

With these objects in view and such others as fairly fall within the scope of the invention, my invention consists of the mechanism illustrated in the accompanying drawings, the peculiar construction, combination, and arrangement of which will be fully described hereinafter, and the specific points of novelty particularly pointed out in the claims.

Referring to the drawings, Figure 1 is an elevation of a lamp-hanger constructed in accordance with my invention. Fig. 2 is a similar view of the same extended. Fig. 3 is a similar view showing one of the frames placed in position to extend the coil. Fig. 4 is a similar view showing one of the frames placed in position to contract the coil. Fig. 5 is a detail perspective view of a part of the spiral conducting and supporting cord. Fig. 6 is a detail perspective view of one of the adjusting-frames.

Similar numerals of reference designate corresponding parts in the several views.

1 designates the hanger, which is composed of two flexible conducting-cords 2 and 3, of the usual construction (*i. e.*, having a central conducting-core formed of fine wires inclosed in a covering of suitable insulating material) and a wire 4 of steel or other spring material, the latter being tempered, so as to have a great deal of elasticity and at the same time sufficient strength to support the lamp 5, which is of the incandescent type. The conducting-cords 2 3 are twisted round the steel wire 4 or wire of other elastic material, as shown in Fig. 5, and the cord thus formed (designated by the numeral 6) may be covered with an ornamental covering, as shown at 7 in the same figure. The cord 6, formed of the conducting-cords 2 3, and the steel wire core or core of other elastic material 4 is then coiled in the form of a spiral, which forms the hanger 1. The upper end of the cord 6 is connected to a suitable support—a rosette 8, secured to the ceiling, wall, or other convenient place—through which support the conductors are connected to the conductors 9 10, through which the electricity is supplied to the lamp 5. The said lamp and socket 5 are secured to the lower end of the spiral cord 6, the conductors of which are in electrical contact with the filament of the lamp in the usual manner.

From the foregoing it will be seen that when in its normal position the lamp will hang about as shown in Fig. 1, but when it is necessary to move the light to another part of the room or to another room it is only necessary to grasp the lamp in the hand and carry it to the desired place, the elasticity of the spring permitting the spiral to stretch out, as shown in Fig. 2. Upon returning the lamp to its place the spring will resume its normal position.

11 designates a frame, which is clearly shown in Fig. 6, and consists of the uprights or side pieces 12 12 and the end pieces 13 14, one of which, as 13, may be made adjustable

upon the side pieces 12, and have set-screws 15 15, by means of which it may be secured at any desired position upon the said side pieces 12, and the end pieces are also provided with studs 16 16, which project outwardly from the ends of the frame.

When it is required to place the lamp low, like a droplight, a portion of the coil 1 is drawn out to the required distance and a frame 11 is placed with its end pieces 13 and 14 between the convolutions of the coil 1 and its side pieces 12 along the sides of the coil, thus holding the coil extended, as shown in Fig. 3. The studs 16 upon the ends of the frame project into the coil far enough to prevent the frame from being accidentally displaced. When it is desired to raise the lamp above its normal position, a portion of the coil 1 is compressed and a frame 11 placed with its ends in the coil to hold it in this position, as shown in Fig. 4. In this instance it is preferable to have the studs 16 project inwardly from the ends 13 14 of the frame, as shown in dotted lines in Fig. 6. These frames may be made long for extending the coil and short for contracting it, if found desirable.

The operation will be clearly understood from the foregoing, and further description thereof is unnecessary.

It will be understood that I do not wish to limit myself to the precise details of construction as herein set forth, as I am aware that modifications may be made therein without departing from the spirit of the invention.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

1. In an electric-lamp hanger, a core formed of elastic material, flexible conductors twisted around the said core, and the whole formed into a spiral, substantially as described.

2. The combination of an electric lamp and flexible conducting-cords connected thereto, with an elastic core arranged within the said conducting-cords and formed into a spiral, substantially as described.

3. In an electric-lamp hanger, a core formed of elastic material, flexible conductors twisted around the said core, and the whole formed into a spiral, in combination with a frame consisting of side rods and end pieces connecting the ends of said side rods, the said frame to be placed in the convolutions of the spiral to hold the latter in a predetermined position, substantially as described.

4. In an electric-lamp hanger, a core formed of elastic material, flexible conductors twisted around the said core and the whole formed into a spiral, in combination with a frame consisting of side rods, end pieces connecting the ends of said side rods, and studs projecting from the said end pieces, the said frames to be placed in the convolutions of the spiral to hold the latter in a predetermined position, substantially as described.

5. In an electric-lamp hanger, a core formed of elastic material, flexible conductors twisted around the said core, and the whole formed into a spiral, in combination with a frame consisting of side rods, an end piece 13, secured to the said rods, connecting them together at one end, an end piece 14, adjustably mounted upon the side rods, connecting them together at their other ends, and studs projecting from the end pieces, substantially as described, for the purpose specified.

6. In an electric-lamp hanger, a core formed of elastic material, flexible conductors twisted around the said core and the whole formed into a spiral, in combination with a frame consisting of side rods, an end piece 13, secured to the said rods connecting them together at one end, an end piece 14, adjustably mounted upon the side rods connecting them together at their other ends, and means for securing the adjustable end piece 14 at any desired adjustment upon the side rods, substantially as described, for the purpose specified.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

FRANK A. WEIMER.

Witnesses:

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J. RAY WILLIAMS.